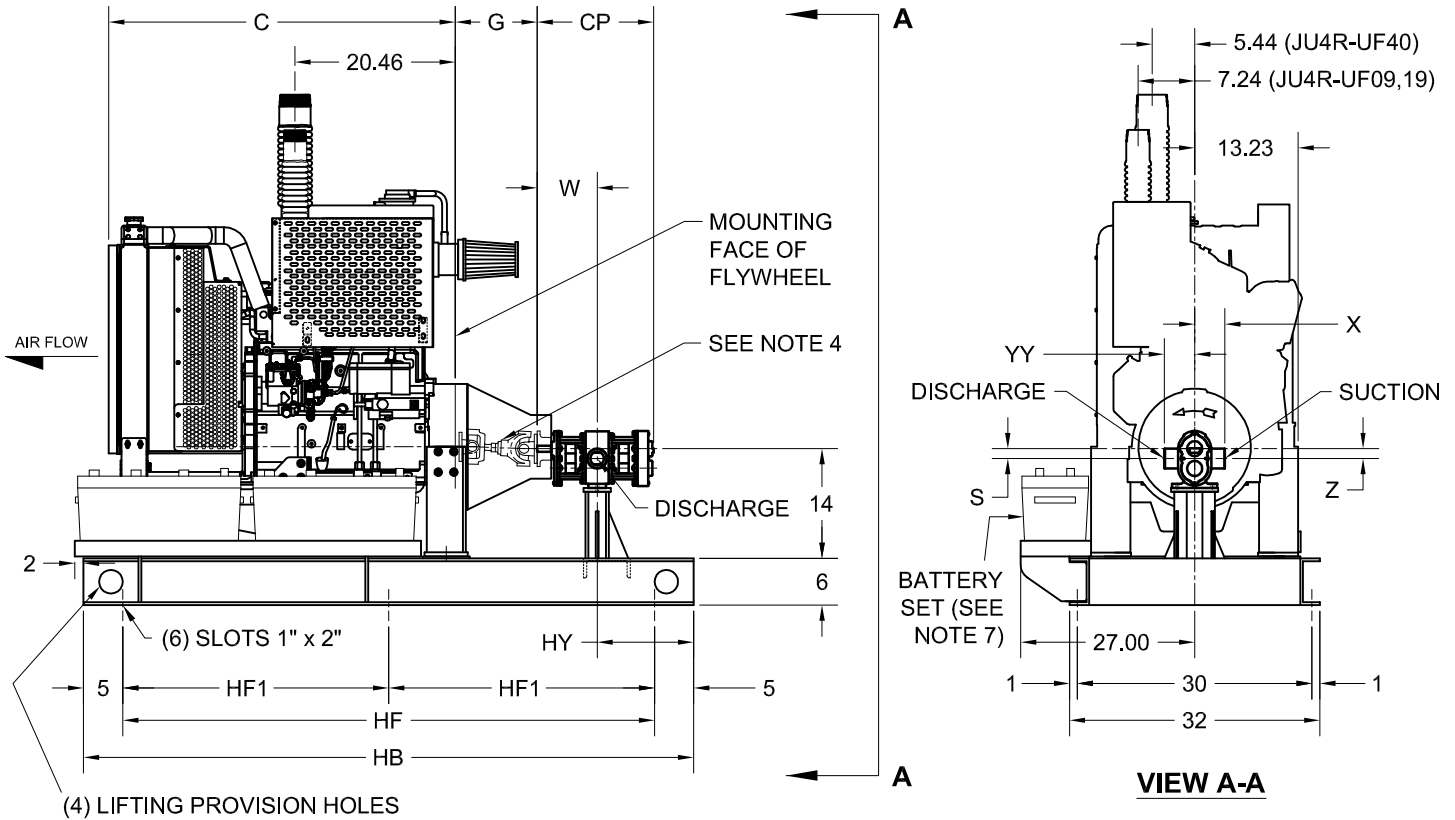


ROTARY GEAR PUMPS (UPPER DRIVE)
PUMP MODELS 20, 80, 150, 160, 300, 400




MODEL	PUMP SIZE		S	Z	HY	X	YY	W	CP	HB	HF	HF1
	SUCT *	DISCH *										
20	1-1/2	1-1/2	1.25	1.25	13.40	4.50	4.13	6.60	13.25	78	68	34
80	1-1/2	1-1/2	1.25	1.25	12.34	3.88	3.88	7.66	14.88	78	68	34
150	2	2	2.00	2.00	11.12	4.72	4.72	8.88	17.75	78	68	34
160	2	2	2.00	2.00	10.12	4.72	4.72	9.88	18.75	78	68	34
300	3	3	2.00	2.00	8.75	4.94	4.94	10.75	20.53	78	68	34
300-388	3	3	2.00	2.00	8.75	4.94	4.94	11.25	21.53	78	68	34
400-112	4	4	2.00	2.00	7.81	5.19	4.72	11.19	22.44	78	68	34
400-128	4	4	2.00	2.00	7.31	5.19	5.19	11.69	23.44	78	68	34
400-140	4	4	2.00	2.00	4.37	5.19	5.19	15.63	27.88	78	68	34

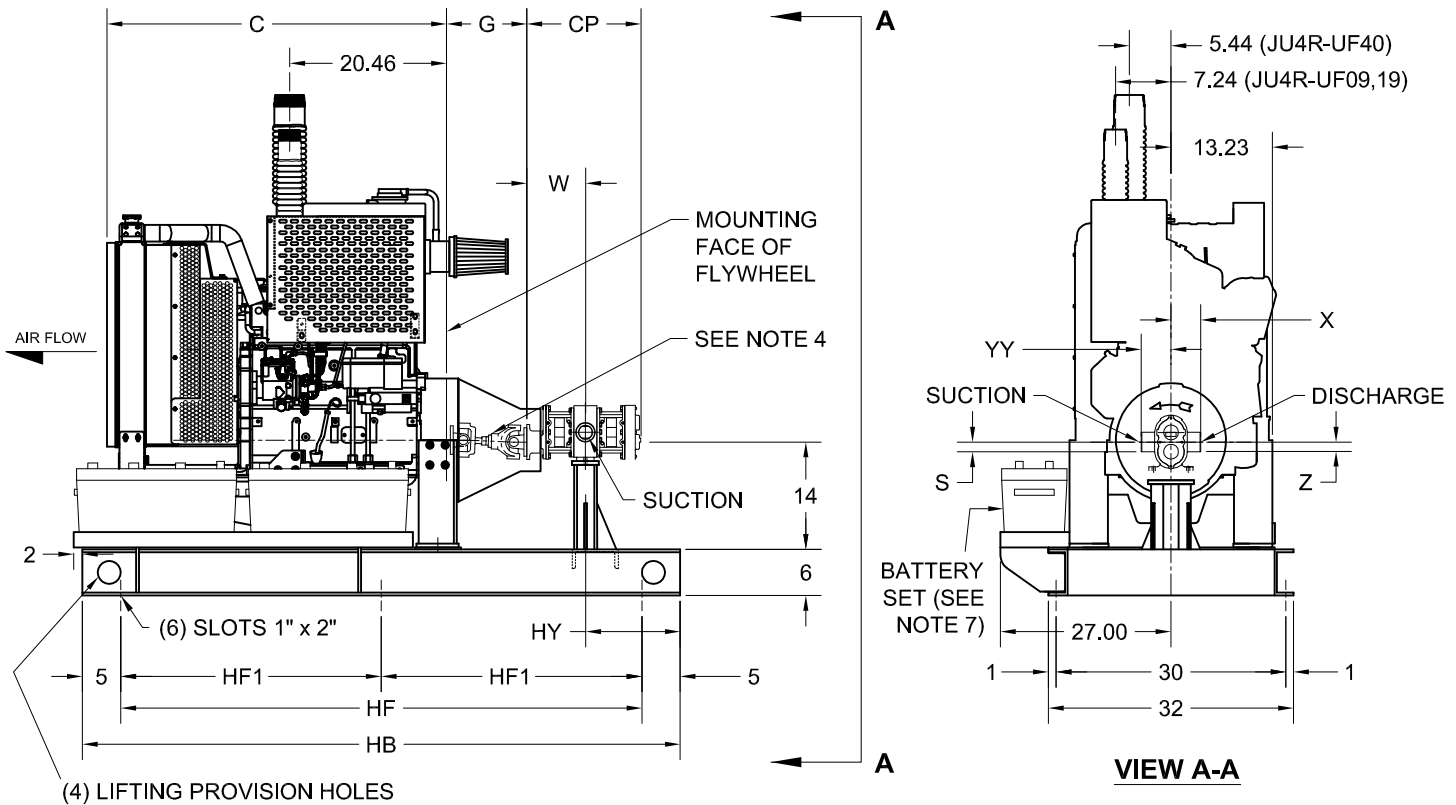
NOTES

- All dimensions are in inches.
- Dimensions may vary $\pm 3/8"$.
- Not for construction purposes unless certified.
- Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of 0.25"±0.08 inches vertically above the pump shaft and 0.00"±0.08 inch parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.
- Refer to individual engine dimension print for all interface connections.
- Left hand engine rotation not available.
- Two 8D batteries and cables shipped loose.

* - Pump Model 20 uses male-NPT threads.
Pump Models 80, 150, 160, 300 use female-NPT threads.
Pump Model 400 uses 300# ANSI flanges.

ENGINE MODEL	C	G		LISTED DRIVESHAFTS
JU4R-UF09 & JU4R-UF19	44.3	10.00		CDS10-SC
JU4R-UF40	44.7	10.50		CDS20-SC

ROTARY GEAR PUMPS (LOWER DRIVE)
PUMP MODELS 20, 80, 150, 160, 300, 400




MODEL	PUMP SIZE		S	Z	HY	X	YY	W	CP	HB	HF	HF1
	SUCT *	DISCH *										
20	1-1/2	1-1/2	1.25	1.25	13.40	4.50	4.13	6.60	13.25	78	68	34
80	1-1/2	1-1/2	1.25	1.25	12.34	3.88	3.88	7.66	14.88	78	68	34
150	2	2	2.00	2.00	11.12	4.72	4.72	8.88	17.75	78	68	34
160	2	2	2.00	2.00	10.12	4.72	4.72	9.88	18.75	78	68	34
300	3	3	2.00	2.00	8.75	4.94	4.94	10.75	20.53	78	68	34
300-388	3	3	2.00	2.00	8.75	4.94	4.94	11.25	21.53	78	68	34
400-112	4	4	2.00	2.00	7.81	5.19	4.72	11.19	22.44	78	68	34
400-128	4	4	2.00	2.00	7.31	5.19	5.19	11.69	23.44	78	68	34
400-140	4	4	2.00	2.00	4.37	5.19	5.19	15.63	27.88	78	68	34

NOTES

- All dimensions are in inches.
- Dimensions may vary $\pm 3/8"$.
- Not for construction purposes unless certified.
- Caution: The driveshaft is designed to operate at a 2° angle with the input and output shafts in parallel. The engine crankshaft is to be set with a parallel offset of $0.25" \pm 0.08$ inches vertically above the pump shaft and $0.00" \pm 0.08$ inches parallel offset horizontally right or left of the pump shaft. Refer to the Certified Driveshaft Instructions Manual for alignment instructions.
- Refer to individual engine dimension print for all interface connections.
- Left hand engine rotation not available.
- Two 8D batteries and cables shipped loose.

- * - Pump Model 20 uses male-NPT threads.
Pump Models 80, 150, 160, 300 use female-NPT threads.
Pump Model 400 uses 300# ANSI flanges.

ENGINE MODEL	C	G		LISTED DRIVESHAFTS
JU4R-UF09 & JU4R-UF19	44.3	10.00		CDS10-SC
JU4R-UF40	44.7	10.50		CDS20-SC